

Precise and flexible dispensing systems

MYSmart[™] series MYD10[™]/MYD50[™] in-line dispensers



Introducing the MYD series Fully automated compact dispensing

The MYSmart series offers a wide range of in-line dispense solutions together with a comprehensive portfolio of valve technologies. The compact MYD10 enables highly advanced non-contact jetting for enhanced dispensing uniformity, throughput and material utilization. For higher-precision applications such as complex chip packaging, the powerful MYD50 platform further boosts productivity with linear motor motion control. The MYSmart in-line dispensing solutions, proven in the most advanced production environments, make it possible to handle a vast array of current and emerging products, assembly fluids and package types.



- 1 Unsurpassed value by combining high end technology with low total cost of ownership.
- 2 From underfill to solder paste the MYD series offers many unique jetting and dispensing technologies offering enhanced flexibility for high volume manufacturing.
- 3 Built in AVI capabilities enables automatic inspection of dispense results.



MYD series automated in-line dispensing systems can handle a wide range of dispensing applications.

FLEXIBLE

MYD series can handle different substrate sizes and compositions to meet specific process requirements. A lot of different applications can be achieved through possibilities such as tilt and rotate, contact and non-contact heating and dual head configurations.

COST-EFFICIENT

Smaller machine dimensions, high quality build and streamlined mechanical design allow the system to run for longer periods of time with less maintenance and lower downtimes. The reduced amount of wear parts in our jets further reduce cost of ownership making the MYD series a cost-effective dispensing machine.

IMPROVED PRODUCTIVITY

Precise temperature controls, on-the-fly fiducial search, robust vision algorithms, low motion Z axis and non-contacting dispensing are some of the feautures included to increase productivity.



Unmatched production value



Non-contact jetting technology



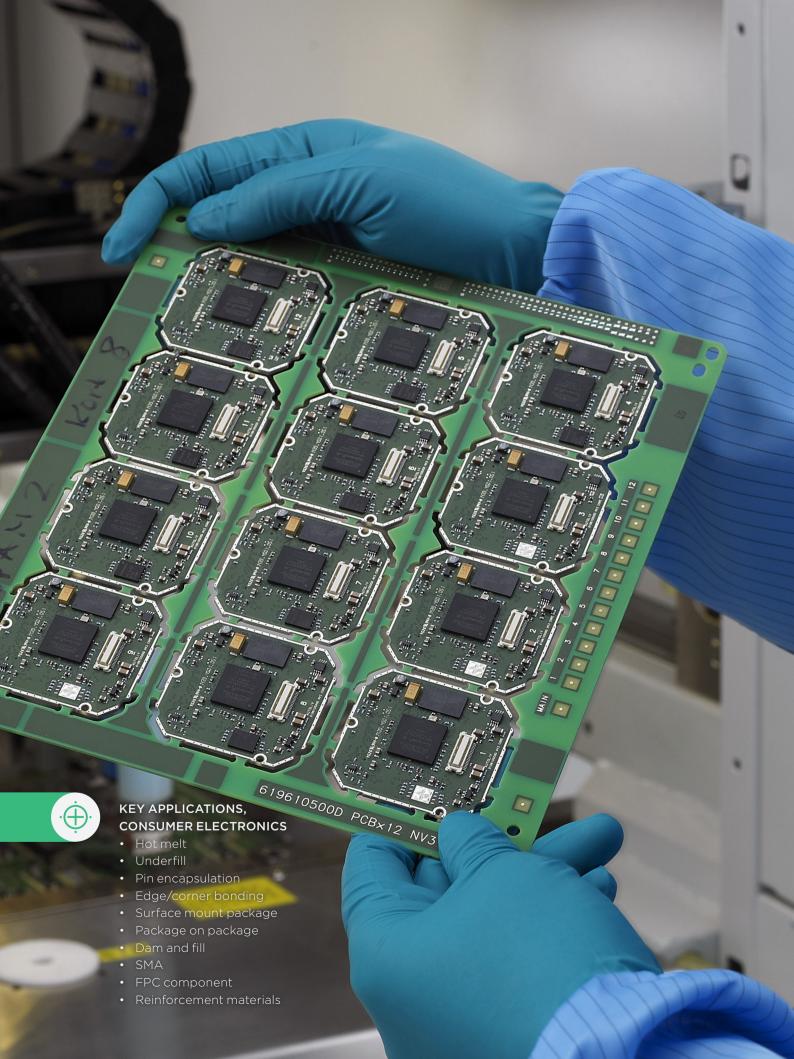
Semi- or full automation



Low maintenance and long service life



High-precision dispensing volume control



MYD series Cross-industry capable platform

The MYD series automatic inline dispensing system is proven across many industries such as electronics, medical devices, optics and industrial assembly to name a few.

Consumer electronics



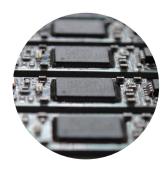


Automotive electronics





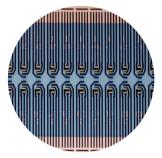
SMT electronics





LED and medical industry





MYD series core components Fully automated compact dispensing

Different types of jet valves provide wide range of capabilities to optimize your process based on your specific materials. For large flow applications, auger valves and positive displacement pumps decrease cycle time while maintaining tight process controls. All jets, valves and pumps are designed with speed, durability and precision in mind.

UNIQUE CAPABILITIES

The MYD jet valves and pumps can produce high drop velocity, allowing a wide range of fluids and applications.

It is easy to change the drop velocity to fine tune the dispensing process and achieve a high process capability.

PRECISE CONTROLS

Closed loop controls and system feedback are key for higher yields. Focus on smart jetting controls, closed loop substrate heating, user specified temperature spot checks and closed loop material dispense are the foundation of quality output.

SIMPLE MAINTENANCE

The MYD jet valves are designed with simplicity and ease of use in mind. Minimal disassembly required and wear parts are easily replaced.



Configurable conveyors. Modular design enables transfer and handling of any PCB, carrier or other unique substrate.



Continuous improvement

Jetting technology that is constantly adapting to new market requirements, enabling more materials, smaller dots, higher accuracy and faster processes.



MYD series **Key features**



Dual lane conveyors

Dual lane help in maximizing your production line and optimizing throughput. Two different jobs can run on each line.



Configurable conveyor stations

Edge clamps, vacuum blocks, vacuum heating and noncontact heating modules offer all the potential material handling options for effcient dispensing.



Dual valve configurations

Synchronous dual valve; two heads work at the same time to save cycle time and improve productivity. Asynchronous dual valve; two heads work at different time. Different materials can be used on each valve.





Tilt options

Pneumatic and electrical tilt and rotate options enable precise material dispense in difficult to reach locations. Individual angle offsets are programmed for precise dispensing.



Temperature spot check

User programmable location where exact temperature is measured and verified with programmable go/no-go logic.



Automatic visual inspection

AVI, automatic visual inspection, improves inspection quality and helps automate the production line.

The AVI can be set to warn, flag and log production results increasing yield traceability and visibility.

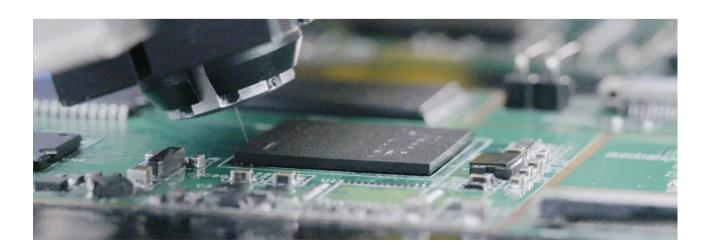
Specifications MYD10X/MYD50X/MYD10i/MYD10iL in-line

	MYD10X	MYD50X
FACILITY REQUIREMENT		
Power supply	AC 200~240V,11A,50/60Hz,2.5kW	AC 200~240V,8A,50/60Hz,1.8kW
Air supply	90psi(6bar)	90psi(6bar)
Dimension	770x1200x1450mm(WxDxH)	770x1300x1530mm(WxDxH)
Weight	650kg	1350kg
Standard compliance	CE	CE

MOTION SYSTEM		
XYZ positioning accuracy	XY: ±30um@3σ Z:±10um@3σ	XY: ±25um@3σ Z:±10um@3σ
Repeatability	XY: ±15um@3σ Z:±5um@3σ	XY: ±10um@3σ Z:±5um@3σ
Max speed	1000mm/s(XY)	1500mm/s(XY)
Acceleration	1.0g	1.5g
Drive system	Servo motor	Linear motor (XY) / Servo motor (Z)

MACHINE PARAMETERS		
Conveyor payload	3kg	3kg
Conveyor width adjusting range	50~475mm	50~500mm
Max board length	Single heating stage: 350mm Dual heating stage: Left-right 300mm Right-left 255mm	Single heating stage: 350mm Dual heating stage: Left-right 300mm Right-left 255mm
Board thickness	0.5~6mm	0.5~6mm
Operating system	Windows 10	Windows 10
Communication protocol	SMEMA	SMEMA
Mini edge clearance	3mm	4mm
Max top clearance	26mm	35mm
Max bottom clearance	23mm	23mm
Z travel	40mm	40mm

DISPENSE AREA			
Max dispensing area (single lane/dual lane)	350x475mm/350x210mm (WxD)	350x500mm/350x218mm (WxD)	
Synchronized dual valve - automatic adjustment (single lane/dual lane)	320x420mm/320x172mm (WxD)	315x405mm/315x160mm (WxD)	
Asynchronized dual valve (single lane/dual lane)	290x450mm/290x197mm (WxD)	290x430mm/290x183mm (WxD)	
Tilt & rotation (single lane/dual lane)	270x420mm/270x182mm (WxD)	270x410mm/270x173mm (WxD)	



	MYD10i	MYD10iL
FACILITY REQUIREMENT		
Power supply	AC 200~240V,11A,50/60Hz,2.5kW	AC 200~240V,11A,50/60Hz,2.5kW
Air supply	90psi(6bar)	90psi(6bar)
Dimension	890x1500x1500mm (WxDxH)	1000x1500x1550mm (WxDxH)
Weight	950kg	1000kg
Standard compliance	CE	CE

MOTION SYSTEM				
XYZ positioning accuracy	XY: ±30um@3σ	Z:±10um@3σ	XY: ±30um@3σ	Z:±10um@3σ
Repeatability	XY: ±15um@3σ	Z:±5um@3σ	XY: ±15um@3σ	Z:±5um@3σ
Max speed	1000mm/s(XY)		1000mm/s(XY)	
Acceleration	1.0g		1.0g	
Drive system	Servo motor		Servo motor	

MACHINE PARAMETERS		
Conveyor payload	3kg	3kg
Conveyor width adjusting range	40~760mm	40~760mm
Max board length	Single heating stage:440mm Dual heating stage: Left-right 355mm Right-left 310mm	Single heating stage:550mm Dual heating stage: Left-right 410mm Right-left 365mm
Board thickness	0.5~6mm	0.5~6mm
Operating system	Windows 10	Windows 10
Communication protocol	SMEMA	SMEMA
Mini edge clearance	2mm	2mm
Max top clearance	45mm	45mm
Max bottom clearance	23mm	23mm
Z travel	60mm	60mm

DISPENSE AREA		
Max dispensing area (single lane/dual lane)	440x760mm/440x355mm (WxD)	550x760mm/550x355mm (WxD)
Synchronized dual valve - automatic adjustment (single lane/dual lane)	410x660mm/410x295mm (WxD)	520x660mm/520x295mm (WxD)
Asynchronized dual valve (single lane/dual lane)	380x690mm/380x320mm (WxD)	490x690mm/490x320mm (WxD)
Tilt & rotation (single lane/dual lane)	360x660mm/360x305mm (WxD)	470x660mm/470x305mm (WxD)

MYD10X/MYD50X/MYD10i/MYD10iL	
STANDARD FEATURES	OPTIONAL FEATURES
Vacuum cleaning module	Weighing system (contact mode/non-contact mode)
Audible and visual alarm	Laser height detecting system
Vision system	Barcode reading
30cc/55cc feeding syringe	Valve for contact dispensing (auger valve/needle valve/needle dispensing)
Standard operating software	Dual valve (synchronized dispensing/asynchronized dispensing)
X,Y,Z fiducial calibration platform	Tilt dispensing in four directions
IPC	Loader & unloader
Single lane	Conveyor heating for waiting and dispensing area
	Dual lane
	Vacuum platform (customized)
	Low fluid level sensor

Bringing tomorrow's electronics to life







CHINA

Axxon Automation Co.,Ltd. A14, Silicon Valley Power Automotive Innovation Park 334 Guanlan, Shenzhen, China Tel: +86 755 8358 6066

NETHERLANDS

Mycronic B.V. High Tech Campus 10 5656 AE Eindhoven Netherlands

MEXICO

Mycronic Mexico Carretera Guadalajara-Tepic No. 7355 Col. San Juan de Ocotán in Zapopan Jalisco C.P. 45019

USA

Mycronic Inc. 554 Clark Road Tewksbury, MA 01876 USA

USA

US application center 1450 Koll Circle San Jose, CA 95112 USA